

## REMARKS

Claims 1-29 are pending in the application.

Claims 1, 2, 5, 6, 8-12, 14, 15 and 17-29 have been rejected.

Claims 3, 4, 6, 7, 13 and 16 were objected to as depending from rejected base claims.

Reconsideration of the Claims is respectfully requested.

### **1. Rejection under Section 102**

*Claims 1-2, 5, 8, 11-12, 14 and 17-29 were rejected under 35 USC 102(e) as being anticipated by U.S. Patent No. 7,042,891, to Oberman et al. (“Oberman”).*

Oberman was cited for “updating an input virtual channel linked list corresponding to the input virtual channel to include the data block . . .” (Office Action at p. 3). But the cluster link memory of Oberman, for example, does not recite updating an input virtual channel linked list corresponding to the input virtual channel to include the data block.

Oberman recites to “reduce latency when the switch is not congested, the switching logic may be configured to perform a cut-through operation by routing packets directly from input ports to output ports without storing any portion of the packet in memory.” (Oberman 3:10-16, Abstract).

With respect to memory, Oberman recites that “[c]luster link memory 404 may be configured as a linked list memory to store incoming packets. Packet free queue 406 is configured to operate as a “free list” to specify which memory locations are available for storing newly received packets. In some embodiments, input block 400 may be configured to allocate storage within shared memory 440 using clusters.” (Oberman 7:31-35).

Clusters, as recited by Oberman, are “used to reduce the number of bits required for tracking and managing packets. Advantageously, by dividing packets into clusters instead of cells, the overhead for each packet may potentially be reduced. For example, in one embodiment shared memory 440 may allocate memory in 128-byte clusters.” (Oberman 7:42-46).

That is, Oberman does not recite updating an input virtual channel linked list corresponding to the input virtual channel to include the data block. Also, Oberman does not recite storing the data block in a receiver buffer of the host device, wherein storing the data block in the receiver buffer includes storing the data block in the receiver buffer at an old free linked list head address. Oberman does not recite transfer of data blocks from an input virtual channel linked list, which includes reading the data block from the receiver buffer at an old input virtual channel linked list head address. Further, Oberman does not a receiver buffer operable to instantiate an input virtual channel linked list for storing data blocks on an input virtual channel basis and to instantiate a free list that identifies free data locations.” Oberman instead recites the use of linked list of pointers to facilitate the manageability of a data packet during times when an output port has enough resources to cut-through by directly forwarding the bytes received at the input port to the output port. (*see* Oberman 3:10-13, Abstract).

In contrast to Oberman, Applicant’s Independent Claim 1 as amended recites, *inter alia*, a “method for routing data *within a host device* comprising: receiving a data block at a receiver of the host device . . . *storing the data block in a receiver buffer* of the host device, wherein storing the data block in the receiver buffer *includes storing the data block in the receiver buffer at an old free linked list head address*; . . . *updating an input virtual channel linked list corresponding to the input virtual channel to include the data block*; determining an output virtual channel for the data block; *transferring the data block from the input virtual channel linked list of the receiver buffer to a destination within the host device via the output virtual channel*, wherein transferring the data block *from the input virtual channel linked list of the receiver buffer to a destination within the host device via the output virtual channel includes reading the data block from the receiver buffer at an old input virtual channel linked list head address*; and *updating the input virtual channel linked list to remove the data block*.” (emphasis added).

Applicant’s Independent Claim 11 as amended recites, *inter alia*, a “method for routing data *within a host device* comprising: . . . *storing the data block in a receiver buffer* of the host device, wherein storing the data block in the receiver buffer *includes*

*storing the data block in the receiver buffer at an old free linked list head address; when the input virtual channel has identified therewith an output virtual channel updating an output virtual channel linked list corresponding to the output virtual channel to include the data block; and when the input virtual channel has not identified therewith an output virtual channel: updating an input virtual channel linked list corresponding to the input virtual channel to include the data block; processing the data block to determine an output virtual channel for the data block; updating an output virtual channel linked list corresponding to the output virtual channel to include the data block; and updating the input virtual channel linked list to remove the data block.”* (emphasis added).

Applicant’s Claim 20 recites, *inter alia*, a “received *data processing and storage system* comprising: . . . a routing module that determines an output virtual channel for data blocks based upon their respective input virtual channels; a receiver buffer operable to instantiate an input virtual channel linked list for storing data blocks *on an input virtual channel basis* and to instantiate *a free list that identifies free data locations*; a linked list control module operably coupled to the receiver buffer; input virtual channel linked list registers operably coupled to the linked list control module; and *free linked list registers* operably coupled to the linked list control module.” (emphasis added).

Applicant respectfully submits that the cited reference of Oberman does not provide a basis for anticipation of Applicant’s claimed invention, because each and every element as set forth in the claims is not found in Oberman; moreover, the identical invention is not shown in as complete detail as is contained in the claims.

## **2. Allowable Subject Matter**

Applicant notes with appreciation the indication of allowability to Claims 3, 4, 7, 13 and 16, which would be allowable if rewritten in independent form.

### **3. Conclusion**

As a result of the foregoing, the Applicant respectfully submits that claims 1-29 in the Application are in condition for allowance, and respectfully requests allowance of such Claims.

If any issues arise, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at ksmith@texaspatents.com.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Garlick Harrison & Markison Deposit Account No. 50-2126.

Respectfully submitted,

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